

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method for processing an organosiloxane film, the method comprising:

loading a target substrate with a coating film formed thereon into a reaction chamber, the coating film comprising a polysiloxane base solution having an organic functional group; and

performing a heat process on the target substrate within the reaction chamber to bake the coating film, wherein the heat process comprises:

a temperature setting step of setting an interior of the reaction chamber at a process temperature by heating, and

a supplying step of supplying a baking gas into the reaction chamber set at the process temperature, while activating the baking gas by a gas activation section disposed outside the reaction chamber, the gas activation section activating the baking gas by bringing the baking gas into contact with a catalyst while supplying the baking gas with heat energy, wherein:

the baking gas is selected from the group consisting of ammonia gas, dinitrogen oxide gas, nitrogen oxide gas, hydrogen gas, argon gas, and nitrogen gas,  
and

the catalyst is selected from the group consisting of tungsten and titanium oxide.

Claim 2 (Original): The method according to claim 1, wherein the process temperature ranges from 250 to 400°C.

Claim 3 (Canceled).

Claim 4 (Currently Amended): The method according to claim 1, wherein the baking gas is selected from the group consisting of ammonia gas and[[,]] dinitrogen oxide gas, ~~nitrogen oxide gas, hydrogen gas, argon gas, and nitrogen gas.~~

Claims 5-6 (Canceled).

Claim 7 (Currently Amended): An apparatus for processing an organosiloxane film, by performing a heat process on a target substrate with a coating film formed thereon to bake the coating film, the coating film comprising a polysiloxane base solution having an organic functional group, the apparatus comprising:

a reaction chamber configured to accommodate the target substrate;

a temperature adjusting section configured to adjust temperature inside the reaction chamber;

a gas supply section configured to supply a baking gas into the reaction chamber, the baking gas being selected from the group consisting of ammonia gas, dinitrogen oxide gas, nitrogen oxide gas, hydrogen gas, argon gas, and nitrogen gas;

a gas activation section disposed outside the reaction chamber and configured to activate the baking gas, the gas activation section being configured to activate the baking gas by bringing the baking gas into contact with a catalyst while supplying the baking gas with heat energy, the catalyst being selected from the group consisting of tungsten and titanium oxide;

an exhaust section configured to exhaust gas inside the reaction chamber; and

a control section configured to control the temperature adjusting section to perform said adjust step, control the gas supply section to perform said supply step, control the gas

activation section to perform said activate step, and control the exhaust section to perform said exhaust step.

Claim 8 (Canceled).

Claim 9 (Currently Amended): The apparatus according to claim 7, wherein the baking gas is selected from the group consisting of ammonia gas[[,]] and dinitrogen oxide gas, ~~nitrogen oxide gas, hydrogen gas, argon gas, and nitrogen gas.~~

Claims 10-11 (Canceled).

Claim 12 (Currently Amended): The apparatus according to claim 7, wherein the control section is ~~configure~~ further configured to execute a ~~the~~ heat process ~~to comprise~~ comprising:

a temperature setting step of setting an interior of the reaction chamber at a process temperature by heating, and

a supplying step of supplying the baking gas into the reaction chamber set at the process temperature, while activating the baking gas by the gas activation section disposed outside the reaction chamber.

Claim 13 (Original): The apparatus according to claim 7, wherein the process temperature ranges from 250 to 400°C.

Claim 14 (New): The method according to claim 4, wherein the catalyst is tungsten.

Claim 15 (New): The method according to claim 14, wherein the gas activation section heats the baking gas to a temperature ranges from 500 to 2,000°C.

Claim 16 (New): The method according to claim 15, wherein the gas activation section heats the baking gas to a temperature ranges from 700 to 1,000°C.

Claim 17 (New): The method according to claim 1, wherein the reaction chamber is configured to accommodate a plurality of target substrates at intervals in a vertical direction, said loading comprising loading the plurality of target substrates.

Claim 18 (New): The apparatus according to claim 9, wherein the catalyst is tungsten.

Claim 19 (New): The apparatus according to claim 18, wherein the gas activation section is configured to heat the baking gas to a temperature ranges from 500 to 2000°C.

Claim 20 (New): The apparatus according to claim 18, wherein the gas activation section is configured to heat the baking gas to a temperature ranges from 700 to 1,000°C.

Claim 21 (New): The apparatus according to claim 7, wherein the reaction chamber is configured to accommodate a plurality of target substrates at intervals in a vertical direction.